

S.E.-IV Sem - Biotech  
Fermentation Technology SE/HY/CBGS/BT/FT  
**(24)**

Q.P. Code : **5422**

(3 Hours)

[ Total Marks : 80 ]

N.B. : Answer any five questions.

- |  |    |
|--|----|
| 1. (a) Describe upstream fermentaion processing.                                 | 10 |
| (b) Describe Fed-batch culture and its uses.                                     | 10 |
| 2. (a) How is cell concentration in fermentation determined ?                    | 10 |
| (b) Describe preservation of useful microbes.                                    | 10 |
| 3. (a) Describe "Crab-tree effect.   | 10 |
| (b) Describe energy and carbon sources in fermentation media.                    | 10 |
| 4. (a) What is oxygen demand in a fermentation process ? Explain its importance. | 10 |
| (b) Describe various parts of typical fermentor.                                 | 10 |
| 5. (a) Describe culturing of animal celis.                                       | 10 |
| (b) How is r-DNA technology useful in Fermentation ?                             | 10 |
| 6. (a) Describe the production f Beer.   | 10 |
| (b) What is steroid transformation ? Explain the importance.                     | 10 |